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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,414	03/31/2001	Scott Cordner	0325.00459	3236

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EXAMINER	
DANG, KHANH	

ART UNIT	PAPER NUMBER
2111	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/823,414	CORDNER, SCOTT	
	Examiner	Art Unit	
	Khanh Dang	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 10-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Silverman et al.

At the outset, it is noted that similar claims will be grouped together to avoid repetition in explanation.

As broadly drafted, these claims do not define any structure/step that differs from Silverman et al. With regard to claims 1, 2, and 12, Silverman et al. discloses an apparatus for coupling a peripheral device to a host comprising: an interface circuit (USB Interface 204, for example) configured to receive a request from the host (also "host" in Silverman et al.) and present a response to the host; and a serial interface engine (SIE 206, for example) configured to generate said response (received via USB

interface 204) to said request when the request is a first type of request (standard USB request) that the serial interface engine (SIE 206, for example) is configured to recognize and pass the request from the interface circuit to an external circuit (208, for example) and the response to the request from the external circuit (208) to the interface circuit (204) when the request is a second type of request (non-standard USB request) that the serial interface engine (SIE 206, for example) is not configured to recognize. See also Figs. 3 and 4 and description thereof.

With regard to claims 3 and 4, it is clear that the external circuit optionally comprises an ASIC. With regard to claim 5, it is clear that the apparatus comprises a universal serial bus (USB) peripheral device (also "peripheral" in Silverman).

With regard to claim 6, the logic circuit (see above) is configured to generate the response to the request using information received from the external circuit (208, for example). See also Figs. 3 and 4 and description thereof).

With regard to claim 7, it is clear that the USB device of Silverman must strictly adhere to USB Protocol set forth in the standard USB Specification. Therefore, a descriptor table must be used in Silverman et al.

With regard to claim 8, it is clear that the USB device of Silverman must strictly adhere to USB Protocol set forth in the standard USB Specification. Therefore, an enumeration request must be performed in Silverman et al.

With regard to claim 10, it is clear from Silverman that the logic circuit (see above) is configured to pass to the external circuit (208) a request selected from the

group consisting of a class request, a vendor request, a custom driver request, and requests implemented to support USB specification changes and enhancements.

With regard to claim 11, the USB device of Silverman must strictly adhere to USB Protocol set forth in the standard USB Specification. Therefore, the response from the external circuit to USB interface circuit to host must comprise a so-called "stall" signal.

The handshake can be either:

- ACK: the request is "serviceable."
- NAK: the request is not "serviceable."
- STALL: The specific endpoint is halted or the specific SETUP command is not supported.

With regard to claims 13-20, it is clear that one using the apparatus of Silverman et al. would have performed the same steps set forth in claims 13-20. Note also that the so-called "response" can be passed either directly from the Silverman et al.'s interface circuit or from Silverman et al.'s external circuit.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverman et al.

Silverman et al., as explained above, discloses the claimed invention. However, Silverman does not disclose that the USB "request" conforms to USB 2.0 (chapter 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to upgrade the USB system of Silverman et al. from USB 1.0 to USB 2.0, since the Examiner takes Official Notice that the use of USB 2.0 is old and well-known; and upgrading the USB system of Silverman et al. from USB 1.0 to USB. 2.0 only involves ordinary skill in the art for the purpose of increasing the data transfer speed, for example. If the Applicants choose to challenge the fact that USB 2.0 is old and well-known, supportive document(s) will be provided upon request.

Response to Arguments

Applicants' arguments filed 8/9/2004 have been fully considered but they are not persuasive.

At the outset, Applicants are reminded that claims subject to examination will be given their broadest reasonable interpretation consistent with the specification. *In re Morris, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997).* In fact, the "examiner has the duty of police claim language by giving it the broadest reasonable interpretation." *Springs Window Fashions LP v. Novo Industries, L.P.,* 65 USPQ2d 1862, 1830, (Fed. Cir. 2003). Applicants are also reminded that claimed subject matter not the specification, is

the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding the prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d, 155 USPQ 687 (1986).

With this in mind, the discussion will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitations that are not in the claims or any arguments that are irrelevant and/or do not relate to any specific claim language will not be warranted.

The Silverman 102 Rejection:

With regard to claims 1, 12, and 13, Applicant argued that Silverman does not disclose "automatically generate the response to a request when the request is a first type of request that the serial interface engine is configured to recognize." Contrary to Applicant's argument, the transactions between the SIE 206, for example, and the host are standard USB transactions and therefore, must be in full compliance with USB logic according to the standard USB Specification. According to USB logic, transactions can be from host to device and from device to host. Each transaction is composed usually from three phases:

Token phase: the host initiates token indicating the future transaction type.

Data phase: the actual data is transmitted through packet. The data direction matches the direction indicated by the token that was transmitted previously.

Handshake phase: the device will automatically respond by a handshake packet

indicating the success or failure of the transaction, or in another word, indicating whether the request is serviceable or not.

Thus, it is clear what if the request is a standard USB request the SIE must generate a response, since the standard USB request is recognized by the SIE. See at least column 6, lines 11-19, column 7, lines 6-15, and column 9, line 25-47.

Although it is not argued by the Applicant, it is also noted that Silverman also discloses a technique for interfacing signals to and from devices employing disparate industry standard function. This technique is preferably implemented by combining an ASIC or other custom logic with, for example, a PLD/FPGA on a board, multichip module, or preferably on a single integrated circuit device. The single integrated circuit (IC) chip combines fixed function(s) and standard interfaces such as standard USB interface, and a PLD/FPGA for specific interface/protocol that can be handled by the standard USB interface/protocol. USB transactions are handled by the SIE using standard USB protocol, and other non-USB transaction, unrecognizable by the SIE via USB interface 204 will be handle by the PLD/PGA via the SIE and USB interface.

The 103 Silverman 103 Rejection:

Applicant did not separately argue the 103 Rejection.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.

Khanh Dang
Primary Examiner